To: DIRECTORS, DEPUTY DIRECTORS, AND BUREAU CHIEFS

From: Dianna L. Taylor

Bureau Chief of Personnel Management

Subject: Technical Vacancy

Date: October 27, 2016

Attached are the Position Summary Sheet and Position Description for the vacant technical position listed below. Please post this vacancy announcement October 31, 2016 in the designated areas.

The deadline for applicants to submit their names for consideration is **4:30 p.m.** on **Tuesday, November 15, 2016**. Applicants will not be accepted after that time and date.

NOTE: A copy of each applicant's ACTIVE Illinois Professional Engineer License must accompany application for this position. Please be advised that if a high volume of applications are received, the applications may be screened to establish a smaller pool of applicants for interview. The screening will be based on the information contained in the application.

All applicants will receive a position description for the position they are applying for. If you have any questions, please contact Jennifer Sunderland or Denise Hamilton at 217/782-5594.

CE V HMA Operations Engineer

Bureau of Materials

Office of Highways Project Implementation

Springfield

Attachments 41338

Technical Applications (PM 1080 rev 9/19/16) <u>must be received</u> by the Bureau of Personnel Management, Room 113, 2300 South Dirksen Parkway, Springfield, IL 62764 (Fax# 217/557-3134) or emailed to <u>DOT.CO.BPM.EmploymentApplications@Illinois.gov</u> by **Tuesday, November 15, 2016**, 4:30 p.m. Please include address, daytime phone and position for which applying if not already listed on application. Applicants will be notified in writing to schedule interviews.

NOTE: A copy of each applicant's ACTIVE Illinois Professional Engineer License must accompany application for this position. Please be advised that if a high volume of applications are received, the applications may be screened to establish a smaller pool of applicants for interview. The screening will be based on the information contained in the application.



Position Summary Sheet

An Equal Opportunity Employer

Classification: Civil Engineer V Salary Range: \$6,315 - \$10,210

Position Title: Hot Mix Asphalt Operations Engineer Union Position: X Yes No

Position Number: PW115-23-75-702-44-01 IPR#: 41338

Office/Central Bureau/District/Work Address:

Office of Highways Project Implementation/Bureau of Materials/126 East Ash Street, Springfield, IL

Description Of Duties:

This position is accountable for managing the activities of the Bureau of Materials/Hot Mix Asphalt Mixtures sub-unit which develops and evaluates policis and procedures for directing the implementation of the statewide asphalt concrete mixtures quality management program.

Special Qualifications:

Required:

- Current Illinois Professional Engineer license
- Valid driver's license
- Statewide travel; overnight travel

Desired:

- Knowledge and experience with highway design, construction and materials testing
- Ability to plan and direct staff for the efficient accomplishment of program objectives
- Strong oral and written communication skills

Shift/Remarks:

8:00 am - 4:30 pm / Monday - Friday

*THIS POSITION IS COVERED UNDER THE REVOLVING DOOR PROHIBITION (RDP) POLICY.

ILLINOIS DEPARTMENT OF TRANSPORTATION POSITION DESCRIPTION

DATE: August 29, 2016 **POSITION:** HMA Operations Engineer

APPROVED BY: Brian Pfeifer OFFICE/DIVISION: Project Implementation/Bureau of

Materials

CODE: PW115-23-75-702-44-01 REPORTS TO: Aggregate, Hot Mix Asphalt, and

Metals Unit Chief

Position Purpose

This position is accountable for managing the activities of the Bureau of Material's Hot Mix Asphalt (HMA) Operations Sub-unit which develops and evaluates policies and procedures for directing the implementation of the statewide HMA mixtures quality management program.

Dimensions

Construction Value 700 - 900 M
Testing Equipment Value: \$400,000
Number of Staff Reporting - Direct: 8 Technical

Number of Hot Mix Asphalt Plants:: 160

Nature and Scope

This position reports to the Aggregate, Hot Mix Asphalt, and Metals Unit Chief. Reporting to this position are the Hot Mix Asphalt Implementation Engineer, Tests Field Engineers, Bituminous Field Engineers, Bituminous Field Coordinator, and the Hot Mix Asphalt Laboratory Supervisor.

This position is accountable for providing guidance to the Department for HMA mix designs; HMA field control; HMA pavement rehabilitation; quality assurance testing for the statewide HMA construction quality assurance program; and developmental applied research evaluation of HMA mixtures, new products, and additives. This is accomplished through designing, testing, and evaluating conventional and special HMA mixtures. The incumbent coordinates the Department's HMA quality management programs.

The incumbent encounters a variety of technical and managerial problems in the performance of these duties. Technical problems involve developing new test methods or modifying and implementing them when the present methods do not meet departmental needs. The incumbent utilizes available laboratory space and manpower, and coordinates the field and laboratory units for maximum efficiency. The greatest challenge for the position is through the application of technology, manpower, and equipment to maintain adequate design and quality control of HMA mixes, and the implementation of new technology gained from laboratory development research evaluations in the Department's HMA construction effort while maintaining satisfactory rapport with the industry and a good public relationship.

This position is personally responsible for developing specifications of new materials, equipment, and ideas; the development of test procedures to determine the adequacy of materials; and substitutions before incorporation into the pavement structure. This position provides field liaison with districts to assure that HMA plants operate in an efficient manner and to assist districts in HMA plant evaluations. The incumbent is accountable, through staff oversight, for the design of HMA mixtures for specialty mixes, furnishings quality assurance data to the various agencies, rating each HMA plant and providing a production rating for contractor

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HMA Operations Engineer DOH/MP&R Page 2

prequalification purposes from data furnished by the districts and providing trouble shooting to ensure proper field control of the plants. This position drafts policies, conducts manpower review and resource allocations, prepares documentation correspondence, give oral presentations at conferences and seminars, and trains, evaluates and motivate staff.

To perform these functions, the incumbent utilizes the following staff:

<u>Hot Mix Asphalt Implementation Engineer</u>, who develops and evaluates policies and procedures for directing the implementation of the statewide HMA mixtures quality management programs.

<u>Tests Field Engineers</u> and <u>Bituminous Field Engineer</u>, who provide technical assistance to ensure that specified testing requirements are performed as required; and conducts/coordinates research and field testing for new technology, materials and equipment related to HMA paving.

<u>Bituminous Field Coordinator</u>, who provides liaison between the subunit and district personnel regarding uniform field control, specification compliance, and plant rating for HMA construction.

Hot Mix Asphalt Laboratory Supervisor, who with staff maintains a planned production scheduling of quality assurance testing, develops HMA mixture designs and new testing procedures.

The work for this position is performed with a minimum amount of supervision. In accordance with the Bureau's established guidelines and policies, the incumbent makes recommendations to the Aggregate, Hot Mix Asphalt, and Metals Unit Chief regarding proposed specifications, policies, large expenditures; offers consulting service to other bureaus, districts, counties, municipalities, contractors and consultants based on analysis of data and experience. The incumbent travels within the state to observe methods and procedures of district personnel such as Hot Mix Asphalt Supervisors.

The incumbent is responsible for the overall administration of the HMA quality management programs; preparation of class manuals and quality of instruction; special provisions and test procedures relating to HMA contracts. The incumbent frequently is in contact with district offices concerning the drafting of specifications, design of mixes, rehabilitation efforts, and the quality control of HMA plants and is responsible for the timely updating and distribution of Department publications. Frequent correspondence with technical bureaus of the Department is required on specifications, new technology, and the dissemination of testing techniques. The incumbent has frequent contacts with manufacturers, contractors, consultants and local agency engineers regarding the proper specifications, machinery or technology necessary to operate plants and construct pavements. The incumbent consults with University of Illinois personnel and equipment manufacturers on materials specifications, and policies to ensure efficient procedures are used. The incumbent has frequent contact with the Illinois Asphalt Pavement Association and technical personnel within the Federal Highway Administration. The incumbent represents the Department on the following committees: Planning Committee for University of Illinois Annual Paving Conference, and all HMA Pavement Committees and Task Forces appointed by this Bureau or within the Department.

The effectiveness of the incumbent is measuring by the ability to provide timely solution to field problems, accurate and timely test information, uniform policy and specification guidance and accurate technical assistance.

Principal Accountabilities

- 1. Provides timely quality assurance testing to ensure proper materials are being furnished.
- 2. Implements new technology.
- 3. Assists the Aggregate, Hot Mix Asphalt, and Metals Unit Chief in writing specifications, policies and updating technology to meet current demands.
- 4. Ensures timely delivery of test results to maintain a high, efficient and economical rate of production.
- 5. Aids district personnel, through field liaison, to keep production equipment operating effectively so that high quality mixes are produced.
- 6. Evaluates, trains, and motivates staff to provide a workable environment among the staff, other units, bureaus, districts and external contacts.
- 7. Ensures consistent administration of the HMA quality management programs.
- 8. Maintains high level of communication among state, federal, educational, and industry personnel regarding the Department's HMA pavement programs.
- 9. Travels to perform duties of this position.
- 10. Performs other duties as assigned to ensure completion of bureau responsibilities.
- 11. Ensures subordinate compliance with all departmental safety rules, practices and procedures.
- 12. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.